REMARKS

Favorable reconsideration is respectfully requested in view of the foregoing amendments and the following remarks.

I. CLAIM STATUS AND AMENDMENTS

Claims 1-4 were pending in this application when last examined and stand rejected.

Claims 1-4 are cancelled without prejudice or disclaimer thereto. Applicants reserve the right to file a Continuation or Divisional Application on any cancelled subject matter.

Claims 5-6 are newly add. Support can be found in claims 1-3 as filed and on page 5, lines 12-19, of the specification as filed.

No new matter has been added.

II. INFORMATION DISCLOSURE STATEMENT

The Examiner is respectfully requested to initial and return a signed copy of the 1449 form submitted with Information Disclosure Statement of December 4, 2006.

III. ENABLEMENT REJECTION

On pages 2-7 of the Office Action, claims 1-4 were rejected under 35 U.S.C. § 112, first paragraph for failing the enablement requirement.

It is noted that on page 2 the Examiner indicates that the specification is enabled for a transgenic rat whose genome comprises a mutant transgene CHRNA4 comprising a mutation that corresponds to S284L. It is noted that new claims 5 and 6 are limited to embodiments along the lines considered enabled by the Examiner. Thus, this rejection is untenable as applied to the new claims and should be withdrawn.

IV. ANTICIPATION/OBVIOUSNESS REJECTIONS

On pages 8-9, claims 1-4 were rejected under 35 U.S.C. § 102(a) as anticipated by Saito et al.

Attached herewith is a Declaration (Attachment A) by the inventors indicating that they were co-authors of the Saito et al. references and that all other authors were merely working

under their direction and control. Thus, Saito et al. is not by another and therefore cannot be properly applied in 102(a) rejections. Thus, this rejection is untenable and should be withdrawn.

Further, on pages 9-11, claims 1-4 were rejected under 35 U.S.C. § 103(a) as obvious over Rozycka et al. in view of Matsuhima et al. Applicants respectfully traverse this rejection as applied to the new claims.

The new claims are directed towards transgenic rats with mutant CHRNA4 (S286L), where in the transgenic rats develop spontaneous epileptic seizure during sleep.

Applicants contend that the above-cited references fail to render the claimed invention obvious as the cited references fail to teach a transgenic rat with epileptic seizures during sleep.

In particular, it is first note that it is well known that native mice can have spontaneous seizures. On the other hand, native rats do not show spontaneous seizures but have been instead used as models using drug induced seizures.

Thus, skilled artisans were motivated to make epilepsy models of mice since some native mice had spontaneous seizures. However, native rats do not have spontaneous seizures and therefore a person of skill in the art would not expect that a transgenic rat could be created having spontaneous seizures. The above-cited references fail to overcome such belief by a person of skill in the art that a transgenic rat epilepsy model is possible.

Furthermore, attached herewith is Klaassen et al. (Attachment B) showing a knock-in mouse using a mutant CHRNA4 gene (S252F or +L264). This knock-in mouse exhibits "epileptic wandering". However, it is not shown that such mouse has epileptic seizures during sleep. Such is further proof that a person of skill in the art would not believe, based on the cited references, that a rat with epileptic seizures during sleep could be produced.

Furthermore, as noted on page 6, line 26 to page 7, line 19, of the specification, the claimed invention is directed towards a transgenic mouse. Said transgenic mouse has one normal copy of CHRNA4 and mutant CHRNA4. This is different than a knock-in mouse which replaces the normal copy with the mutant copy. Thus, the effects of having both CHRNA4 (mutant and wild) cannot be predicted based on the cited references. Thus, it is respectfully suggested that, as applied to new claims 5-6, the cited references fail to teach or suggest the claimed the invention. Withdrawal of this rejection is therefore solicited.

CONCLUSION

In view of the foregoing amendments and remarks, it is respectfully submitted that the present application is in condition for allowance and early notice to that effect is hereby requested.

If the Examiner has any comments or proposals for expediting prosecution, please contact the undersigned attorney at the telephone number below.

Respectfully submitted,

Shinichi HIROSE et al.

/William R. Schmidt, II/

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